

**DIELECTROPHORESIS DEVICE AND METHOD HAVING
INSULATING RIDGES FOR MANIPULATING PARTICLES**

ABSTRACT OF THE DISCLOSURE

Embodiments of the present invention provide methods and devices for manipulating particles using dielectrophoresis. Insulating ridges and valleys are used to generate a spatially non-uniform electrical field. Particles may be concentrated, separated, or captured during bulk fluid flow in a channel having insulating ridges and valleys.

SF_1121152

h:\ip\documents\clients\sandia national laboratories\33531 us\33531 appl as filed.doc